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**To:** Eoc, Epahq [Eoc.Epahq@epa.gov]  
**Subject:** Hurricane Harvey Management Report for Monday, September 4, 2017  
**Attachments:** Senior+Leadership+Briefing+--Post+Tropical+Cyclone+Harvey-Hurricane+Irma....pdf; DHS Component Actions - Post-Tropical Cyclone HARVEY - East TX (0600 ET ....pdf; Senior Leadership Briefing - Hurricane Irma.pdf; Harvey Management Report\_9-4 Final.pdf

Hello,

Attached and copied below, please find the HQ EOC Management Report for EPA's Response to Hurricane Harvey. The HQ EOC will be issuing this report daily. As response efforts change over time, the issuance frequency may be amended.

If you have any questions, please contact the EOC Manager at 202-250-8903 or the Deputy EOC Manager 202-250-8904. Thank you.



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September 4, 2017 19:05 ET

**HURRICANE HARVEY MANAGEMENT REPORT**

*Information contained in this report reflects HQ and regional reporting from the most recently completed operational period as well as other reports provided by HQ, regional and interagency sources.*

*The Senior Leadership Briefing and DHS Component Actions Reports are attached.*

National Incident Management Objectives

- Objective 1: Ensure that health and safety of the EPA response is considered at all times.
- Objective 2: Establish an incident management structure and processes employing the Incident Command System to enable effective overall management of the event with deployment of resources (staff and equipment) in a rapid, aggressive and well-coordinated manner.
- Objective 3: Ensure prompt Review and Processing of Fuel Waiver requests.
- Objective 4: Prepare for and provide Rapid Assessment of Industrial facilities as requested by the States or under EPA's statutory program responsibilities for CERCLA Superfund, RMP and FRP facilities. Working with agencies in affected States, contact industrial sources within the impacted areas to determine their operational status and determine what support can be provided with the monitoring of the start-up of industrial sources along the coastal areas.
- Objective 5: Prepare for and provide Rapid Assessment & Technical Assistance Drinking Water & Wastewater facilities as requested by the State or local government. EPA will support State agencies in contacting drinking water and waste water systems.

- Objective 6: Prepare a Sustained Response Plan that outlines the resource and equipment needs for a long duration response.
- Objective 7: Activate the Agency's Crisis Communication Plan to insure effective and efficient coordination of all incident communications.
- Objective 8: Encourage a collaborative federalism approach, where national state and local governments interact cooperatively and collectively to solve common problems.

## **Executive Summary**

Hurricane Harvey made landfall at 23:00 ET, August 26<sup>th</sup>, as a Category 4 storm near Rockport. Harvey was downgraded to a Category 1 with maximum sustained winds of 85 mph and located approximately 25 miles southwest of Victoria by 07:00 on August 27<sup>th</sup> moving northwest at 6 mph. Harvey stalled over southeastern TX through the middle of the week. Due to the slow motion of Harvey and a prolonged period of onshore flow, water levels remain elevated. The impacted area received more than 50 inches of precipitation, and catastrophic flooding occurred. Harvey was eventually downgraded to a tropical storm with maximum sustained winds of 45 mph.

Rivers and bayous in southeast TX, particularly in the Beaumont and Port Arthur regions experienced major to record flooding through the week with several crests not being reached until the weekend. Flooding continued across much of the middle and upper TX coast into southwest LA for several weeks. Flash flood watches and warnings were in effect from parts of northern MS and across western TN, KY, southern IN and southwest OH. On September 1<sup>st</sup>, the National Weather Service (NWS) reported Harvey classification as a Post-Tropical Cyclone with no more impacts to TX.

Post Tropical Cyclone Harvey was located 20 miles west-northwest of Lexington, KY on September 2<sup>nd</sup>. The National Weather Service (NWS) reported that remnants of Harvey were located 60 miles east northeast of Fort Knox, KY moving at 15 mph. Harvey would continue to move through portions of the Northeast and Mid-Atlantic through the weekend. There were expectations of localized flash flooding and isolated thunderstorms, however, no widespread significant impacts were expected. Major to record flood impacts were expected to continue along the mid and upper TX coasts and in LA as peak river crests were likely to occur for most of the weekend. Long duration flooding will significantly hamper response and recovery activities. As of the evening of September 3<sup>rd</sup> Harvey continued to weaken and was expected to dissipate over the Mid-upper OH Valley.

On September 4<sup>th</sup> the Acting Regional Administrator and advisors to the Administrator met with the Houston Mayor and other local and state officials.

### Arkema Chemical:

Arkema Chemical Facility located in Crosby is a Risk Management Plan (RMP) facility. It manufactures liquid organic peroxides and two substances, sulfur dioxide (anhydrous) and 2-methylpropene are present at, or above, the minimum threshold quantity for RMP applicability. There have been no accidental off-site releases of applicable RMP chemicals from the facility in the previous five years. Officials had warned that the plant could explode after its coolant system for the organic peroxide tanks and backup generators failed due to damage from Tropical Storm Harvey. Flooding prevented repairs from being made.

On August 31<sup>st</sup>, at approximately 03:45 ET, two incidents of trailer fires were reported at the Arkema facility. According to local responders and media, one of the eight refrigerated trailers on site auto-ignited and burned. As of 14:30 on August 31<sup>st</sup>, Arkema management reported that three additional peroxide trailers were close to

Self-Accelerating Decomposition Temperature (SADT) which is between 19 and 70 degrees Fahrenheit depending on the type of peroxide. Region 6 continues to work with the Interagency Modeling Atmospheric Assessment Center on modeling of anticipated future releases at the site. The modeling products are being delivered to Unified Command.

EPA also identified a risk for a vessel of 38,000 pounds of Isobutylene that is close to the trailers of peroxide. The risk is radiant heat from burning peroxide could ignite the isobutylene. EPA deployed an On-Scene Coordinator (OSC) to the Unified Command. Other EPA emergency response personnel in TX are in direct contact with first responders in Harris County and are providing federal assistance and resources.

EPA's Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft has been making multiple overflights of the Arkema facility. As of their fifth flight, ASPECT reported no detections with the exception for 2 detections of benzoyl peroxide at approximately 5 ppm which is just above the detection limit. Mobile ground air monitoring for pollutants of concern includes VOCs, SO2 and CO.

As of September 2<sup>nd</sup>, aerial reconnaissance photos indicated that flood waters within the facility have receded significantly. EPA collected surface water runoff samples downstream of the facility at 4 locations near a residential area. EPA's mobile laboratory analyzed the samples and will continue to maintain a 24-hr presence with air monitoring capabilities.

Harris County Office of Homeland Security and Emergency Management conducted air monitoring in the area. Four air monitoring teams from EPA, Harris County Pollution Control and Liberty County are conducting monitoring around the exclusion zone. So far, all readings are non-detect at ground levels.

On September 3<sup>rd</sup>, the Crosby Volunteer Fire Department and the Harris County Fire Marshal's Office ignited the remaining peroxide trailers at the Arkema facility using a controlled method to eliminate the risk of additional uncontrolled events. Unified Command is monitoring smoke and air quality, for any potential additional fires in the area, and will maintain aerial asset availability for deployment as needed.

EPA has been sending aerial surveillance aircraft to test resulting smoke and continues to do ground level air quality monitoring. EPA's plan instrumentation is capable of measuring 78 different chemicals, including peroxides. Neither testing methods found toxic concentration levels in areas away from the evacuated facility. EPA will continue to maintain a rotational 24-hrs presence and air monitoring capabilities at the incident command operations center. Region 6 reported that the 1.5-mile evacuation zone has been lifted as of September 4<sup>th</sup>.

#### DISCHARGE/RELEASE RESPONSE

Hotline Calls as of September 4 <sup>th</sup>	
Number of Harvey Related Calls Received During Reporting Period 1300- 0100	3
Total Number of Harvey Related Calls to Date	139
* EPA is assessing each call to determine appropriate response and forwarding reports to field personnel to conduct further assessments and response as needed.	

Beaumont, TX:

As of September 4<sup>th</sup>, Beaumont's wastewater treatment plant (WWTP) is fully operational and running. All units are being powered by generator and are fully functional. The collection system has been effectively shut off due to power loss. The WWTP lost two pumps earlier, but they have been restored. The city is focusing the majority of its resources on the drinking water issues currently being experienced and then will begin assessing and working on the wastewater side.

EPA has secured an operational staging area in the parking lot of the Central Mall, adjacent to the U.S. Coast Guard (USCG) Marine Safety Unit (MSU) in Port Arthur. Two EPA OSCs are mobilizing from Houston on September 5<sup>th</sup> along with GIS/Data Support. Currently, most of the area is still inaccessible due to flooding. EPA will continue to coordinate with local, state and federal response partners to plan for further assessment and potential response actions once the flood waters recede. The priority for the next operational period is to set up command posts with work space and continue developing an operational structure to begin field operations.

#### Region 6:

The Region 6 REOC is currently activated and working under a limited Emergency Support Function (ESF) 10 FEMA Mission Assignment (MA). In addition, Region 6 has received an MA to assist TX with drinking water, wastewater, and Hazmat recovery operations. This MA for almost \$8.6 million added 184 EPA and Coast guard (CG) personnel to the Texas Commission on Environmental Quality (TCEQ) Harvey response in Corpus Christi, Houston, and surrounding impacted areas. An additional MA for \$20,000 has been issued to deploy EPA employees to various locations which include but are not limited to the TX EOC and the Denton RRCC to support response operations.

#### Disaster Declarations Issued:

- On August 25<sup>th</sup>, a major disaster declaration was issued for the state of TX for Hurricane Harvey.
  - An additional 14 counties were added on August 31<sup>st</sup>.
- On August 28<sup>th</sup>, an emergency declaration was issued for the state of LA for Tropical Storm Harvey.
- On September 1<sup>st</sup>, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued an Emergency Waiver Order for TX and LA. The Waiver is granted to support EPA in taking appropriate actions to prepare for, respond to, and recover from a threat to public health, welfare, or the environment caused by actual or potential oil and hazardous materials incidents resulting from Hurricane and Tropical Storm Harvey.
- As of September 3<sup>rd</sup>, a major Disaster Declaration is in effect for 36 counties in TX.

#### **Regional Mission Assignments:**

<b>Mission Assignment Number</b>	<b>Funding Amount</b>	<b>Description of Assignment</b>
MA4332DRTX3	\$8,592,000	R6 Field Ops incl. assessing drinking & waste water infrastructure, implementation of Response Manager tracking system, response to hazardous substances & oil discharges or releases.
MA4332DRTX1	\$20,000	Deployment of EPA to various locations, including but not limited to TX EOC and the Denton RRCC to support response operations.
<b>Total Funds</b>	<b>\$8,612,000</b>	

Amendment No. 4 to FEMA-4332-DR-TX amends the cost-sharing arrangements regarding Federal funds provided. Authorizes:

- 90 percent Federal cost-share for debris removal

- 100 percent Federal cost-share for Emergency Protective Measures for 30 days from the start of the incident and then 90 percent thereafter

Region 6 deployed 2 OSCs on August 25<sup>th</sup>. One OSC deployed to the FEMA Regional Response Center in Denton and the second OSC to the State of Texas Operations Center in Austin. Region 6 also requested 4 OSCs from Region 2 for deployment to the Houston area. Four OSCs from the availability list agreed to deploy on September 1<sup>st</sup>, depending on flight availability. The REOC in Edison is coordinating logistics for the deploying OSCs.

#### Number of R6 Personnel Involved:

Personnel	EPA R6 Dallas	FEMA Denton	TX SOC Austin	TCEQ Austin	Houston	Corpus Christi	Totals
R6	43	2	2	10	22	13	92
START	7		1	1	12	6	27
ERRS					7	8	15
Other Contractor	1						1
TOTAL	51	2	3	11	41	27	135

#### EPA Headquarters:

The HQ EOC activated at 09:00 ET on August 28<sup>th</sup> and is at Level 1 operations in support of the Region 6 response to Tropical Storm Harvey. The HQ EOC is coordinating on several levels with Region 6 and other Federal agencies. The HQ EOC has deployed personnel to the FEMA NRCC to staff the ESF #10 watch. EPA Senior Management that comprise the Policy Coordinating Committee (PCC) has developed and will update senior management objectives that will form the basis of field strategy and tactics in response to Harvey.

#### Headquarters Mission Assignments:

Mission Assignment Number	Funding Amount	Description of Assignment
MA4332DRTX1	\$10,000	FEMA HQ ESF-10 Desk Support
4332DRTXEPA0200	\$40,000	FEMA HQ ESF-10 Desk Support
Total Funds	\$50, 000	

#### Number of HQ Personnel Involved in the EOC:

Personnel	AO	OAR	OCFO	OCSP	OECA	OEI	OGC	OLEM	OP	ORD	OW	Totals
Employees	1	1			1	1	1	9	1	1	1	17
Contractors						3		3				6
TOTAL	1	1			1	4	1	12	1	1	1	23

#### National Incident Management Team (N-IMAT):

EPA activated the N-IMAT consisting of highly skilled response personnel from Regions 3, 4, and 5 to advise and assist R6 with response activities. Members of the N-IMAT arrived in Dallas on August 29<sup>th</sup> and are integrated into the Incident Management Team structure.

On August 30<sup>th</sup>, N-IMAT members traveled to Corpus Christi to establish the Unified Command. EPA Region 6, TCEQ, Texas General Land Office (TGLO), and Coast Guard are operating in Unified Command. The Unified Command has seven teams in the field conducting reconnaissance. The teams consist of personnel from Region 6, TCEQ, Civil Support Corps, and a CG strike team.

#### Criminal Investigation Division (CID):

EPA's Criminal Investigation Division (CID) deployed 25 special agents as a Quick Reaction Team (QRT) to south TX to support the response to Harvey. The response is managed as part of the Mission Assignment (MA) under ESF-13. QRT's role is to provide law enforcement support, search and rescue operations, medical assistance teams and mortuary teams during the initial response to Harvey. EPA's QRT is in Houston completing in-processing with ESF-13 officials and US Marshals. QRT joins over 1100 federal law enforcement officers from multiple departments and agencies in TX supporting ESF-13 missions. NCERT remains on standby awaiting an ESF-10 MA.

#### State, Local and other Federal Agency Actions:

On September 1<sup>st</sup>, the Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a waiver of hazardous materials regulations. The waiver applies to persons conducting operations under the direction of EPA Region 6 within the Hurricane and Tropical Storm disaster and emergency areas of TX and LA. The waiver is granted to support EPA in taking appropriate response actions.

National Guard deployments to the affected region are ongoing. Additional National Guardsmen from AR, OK, and VA are preparing to deploy between September 4<sup>th</sup> to the 7<sup>th</sup>.

#### **EPA Activities: Region 6:**

Region 6 has integrated into Unified Command with other state and federal partners and are in the field conducting rapid needs assessments. The TCEQ will use the available technology that will best support the field activities being conducted, which may include the use of hand held air monitoring equipment.

On September 2<sup>nd</sup>, EPA sent four additional Drinking Water/Wastewater Assessment Teams to Corpus Christi, and four Drinking Water/Wastewater Assessment Teams to Houston. As of September 4<sup>th</sup>, teams are prioritizing facilities and actively conducting evaluations.

#### Other EPA Response Activities

Superfund NPL Sites: EPA has conducted Rapid Response Assessments at the 41 Superfund sites in the impacted areas using aerial images as well as direct contact with companies who are responsible for on-going cleanup activities. EPA has determined that 28 Superfund sites in the area do not show damage or excessive flooding associated with Harvey. EPA determined that 13 sites have been flooded and/or are experiencing possible damage due to the storm. Of these sites, three (Brine Service Co, Falcon Refinery and the Geneva Industries), have been inspected and it has been determined that they do not require emergency cleanup; although, additional sampling in the area will continue to be conducted.

Multiple Superfund site inspections are planned for the next two operational periods. Teams completed one inspection this operational period and plan to inspect San Jacinto, Highlands Acid Pit, and US Oil Recovery sites on September 4<sup>th</sup>. On September 5<sup>th</sup>, teams plan to inspect the remaining sites (French Ltd., Gulfco Marine,

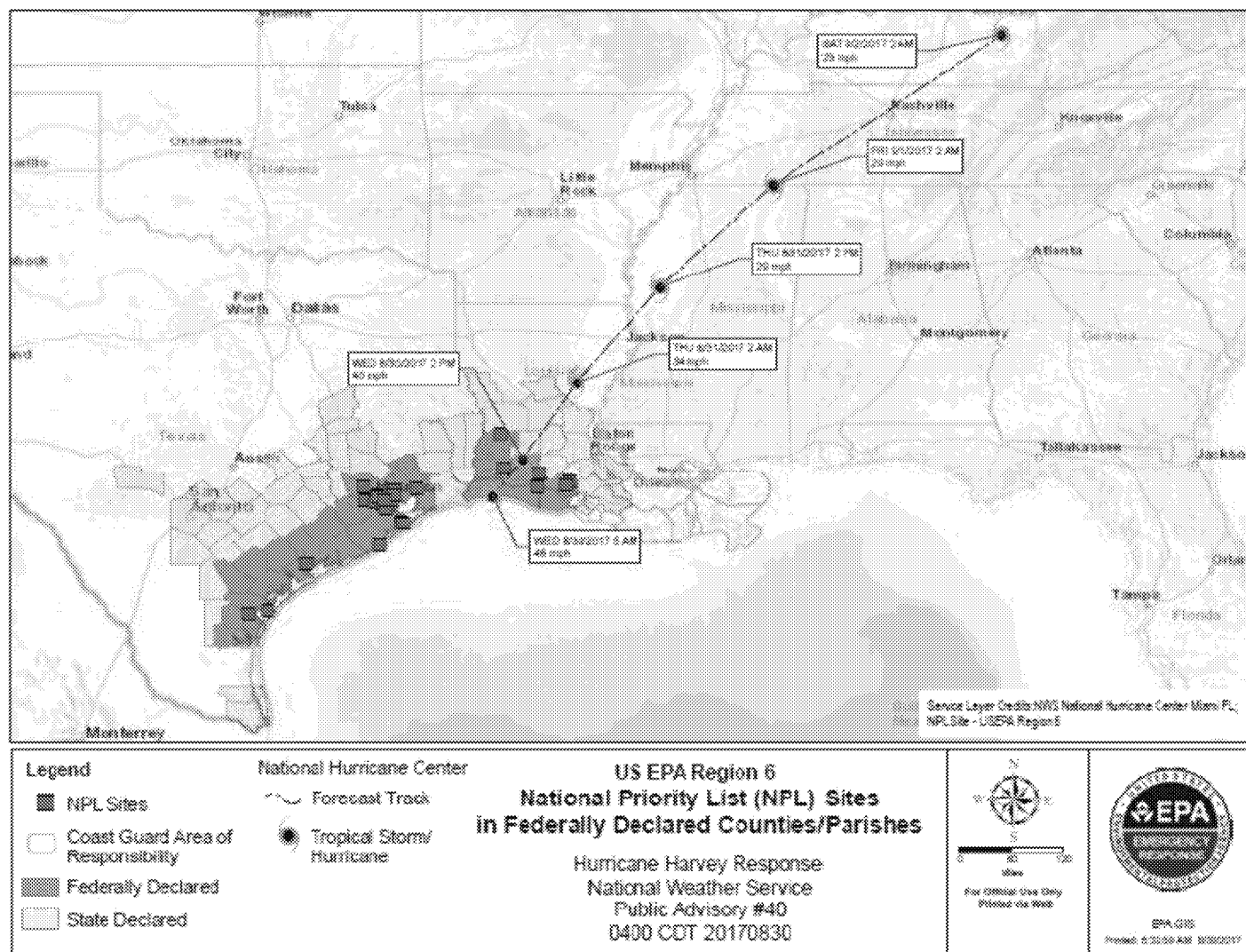
Malone Services, Patrick Bayou, Petro-Chemical Systems, Triangle Chemical, and Bailey Waste). Detailed information may be found in the table below.

Superfund Sites within Federally Declared Counties						
Hurricane Harvey Rapid Response Assessment	Phase 1	Phase 2		Phase 3	All Phases Completed	County
	Rapid Response Assessment	Site Inspection Needed	Inspected	Additional Response Action		
TEXAS						
SITE NAME						
ALCOA (Point Comfort) / LAVACA BAY	8/29/17	No			8/29/17	Calhoun
BAILEY WASTE DISPOSAL	9/1/17	Yes				Orange
BRINE SERVICE CO.	8/30/17	Yes	8/30/17	No	8/30/17	Nueces
BRIO REFINING INC.	9/1/17	No			9/1/17	Harris
CONROE CREOSOTING COMPANY	9/1/17	No			9/1/17	Montgomery
CRYSTAL CHEMICAL CO.	8/30/17	No			8/30/17	Harris
DIXIE OIL PROCESSORS INC.	9/1/17	No			9/1/17	Harris
FALCON REFINERY	8/31/17	Yes	8/30/17	No	8/30/17	San Patricio
FRENCH, LTD.	9/1/17	Yes				Harris
GENEVA INDUSTRIES / FUHRMANN ENERGY	9/1/17	Yes	9/3/17	No		Harris
GULFCO MARINE MAINTENANCE	9/1/17	Yes				Brazoria
HARRIS (FARLEY STREET)	9/1/17	No			9/1/17	Harris
HART CREOSOTING	9/1/17	No			9/1/17	Jasper
HIGHLANDS ACID PIT	9/1/17	Yes				Harris
JASPER CREOSOTING	9/1/17	No			9/1/17	Harris
JONES ROAD GROUNDWATER PLUME	8/29/17	No			8/29/17	Harris
MALONE SERVICES COMPANY	9/1/17	Yes				Galveston
MANY DIVERSIFIED INTERESTS, INC	9/1/17	No			9/1/17	Harris
MOTCO, INC.	8/31/17	No			8/31/17	Galveston
NORTH CAVALCADE STREET	8/29/17	No			8/29/17	Harris
PALMER BARGE LINE	9/1/17	No			9/1/17	Jefferson
PATRICK BAYOU	9/1/17	Yes				Harris
PETRO-CHEMICAL SYSTEMS, INC. (Turtle Bayou)	9/1/17	Yes				Liberty

SAN JACINTO RIVER WASTE PITS	9/1/17	Yes				Harris
SIKES DISPOSAL PITS	8/29/17	No			8/29/17	Harris
SOL LYNN / INDUSTRIAL TRANSFORMERS	8/29/17	No			8/29/17	Harris
SOUTH CAVALCADE STREET	8/29/17	No			8/29/17	Harris
STAR LAKE CANAL	8/30/17	No			8/30/17	Harris
STATE MARINE OF PORT ARTHUR	9/1/17	No			9/1/17	Jefferson
TEX-TIN CORP.	9/1/17	No			9/1/17	Galveston
TRIANGLE CHEMICAL COMPANY	9/1/17	Yes				Galveston
UNITED CREOSOTING CO.	9/1/17	No			9/1/17	Montgomery
US OIL RECOVERY	9/1/17	Yes				Harris
<b>LOUISIANA</b>						
AMERICAN CREOSOTE DERIDDER	09/01/17	No			9/1/17	Beauregard
D.L. MUD, INC.	08/29/17	No			8/29/17	Vermillion
EVR-WOOD TREATING/EVANGELINE REFINING COMPANY	09/01/17	No			9/1/17	Acadia
GULF COAST VACUUM SERVICES	08/29/17	No			8/29/17	Vermillion
GULF STATE UTILITIES (North Ryan Street)	08/31/17	No			8/31/17	Calcasieu
MALLARD BAY LANDING BULK PLANT	08/29/17	No			8/29/17	Cameron
PAB OIL & CHEMICAL SERVICE	08/29/17	No			8/29/17	Vermillion
SBA SHIPYARD	09/01/17	No			9/1/17	Jefferson Davis
<b>Status Summary</b>						
Rapid Response Assessment Completed		<b>41</b>				
Sites with no further action		<b>28</b>				
Sites in Phase 2		<b>13</b>				



## *Superfund National Priority List Sites in Federally Declared Counties*



### EPA Laboratory/Analytical Services:

EPA's Portable High-Throughput Integrated Laboratory Identification System (PHILIS) units were deployed from Denver to the Corpus Christi area and anticipated to arrive on September 1<sup>st</sup>. The mobile laboratory will be used to process environmental samples. At least six locations are being monitored, all monitoring results are currently at background conditions. An EPA Trace Atmospheric Gas Analyzer (TAGA) is a self-contained mobile laboratory capable of real-time sampling and of outdoor air or emissions. The Louisiana Department of Environmental Quality (LDEQ) offered EPA the use of its Mobile Air Monitoring Lab to collect air data in the Beaumont/Port Arthur area. As of September 4<sup>th</sup>, EPA's TAGA vehicle, along with EPA personnel, are in Houston supporting air monitoring.

On August 31<sup>st</sup>, EPA deployed four teams made up of On Scene Coordinators and contractors to Houston to coordinate with TCEQ, TGLO, and USCG and began responding to releases and discharges at facilities.

On September 2<sup>nd</sup>, EPA sent four additional Drinking Water/Wastewater Assessment Teams to Corpus Christi, and four Drinking Water/Wastewater Assessment Teams to Houston.

EPA's Houston laboratory reported that they would be closed until September 5<sup>th</sup>. Their laboratory and office building were not damaged. Region 6 had back-up capabilities for laboratory services should the Houston facility

remain closed. The mobile laboratory and response vehicles are secure and would be deployed as road conditions allow.

On September 3<sup>rd</sup>, the agencies under Unified Command conducted operations in both the Corpus Christi Branch and Houston Branch. The Oil Discharge Assessment Group utilized by Corpus Christi Branch during the previous operational period was replaced with an Emergency Response/Recovery Group. Additionally, an Oil Recovery Group consisting of two teams was added to the Corpus Christi Branch to begin closing out oil discharges discovered by the assessment teams. Geographic areas focused on by Corpus Christi Branch during the previous operational period including Port Aransas and Mustang Island are largely complete except orphan containers being carried in from the tide. These containers will be addressed as they are discovered. Projected Corpus Christi Branch geographic areas for this operational period include Rock Port, Aransas Bay and Victoria. In addition, an Aerial Operations Team will be located in Houston.

- The oil discharge assessment branch visited thirteen facilities and queried seven throughout the Houston area of responsibility. Of those targets, two are of particular concern and were referred for response teams and five to follow-up on in the next week.
- The Magellan facility along the Houston Ship Channel reported approximately 25,000 barrels of a gas/stock blend discharged within their facility and currently contained in secondary containment. An oil discharge response organization (OSRO) has been hired and they drafted a transfer plan to transfer from secondary containment back into a facility tank.
- The San Jacinto River and Rail Facility reported an approximately 15,000 gallons of waste oil discharged within their facility to include 12 mystery drums scattered across the facility. Damage Assessment teams confirmed that vegetation and residual ponds are coated with oil. An OSRO has been hired to commence clean-up operations. No mobile oil is visible in the waterway.
- Helicopter operations continued throughout the day and reported no major pollution concerns, but noted small targets to investigate along the shoreline. They did note that the Lake Houston area was still heavily flooded, but waters were receding quickly.
- Hazard evaluation is 100% complete on shoreline assessments.
- ASPECT is preparing for flight 9 with a follow-on flight 10 consisting of Arkema and zones east of Crosby. Rapids Needs Assessment (RNA) targets include RMP locations, wastewater facilities, water treatment facilities, and National Priority List (NPL) sites. ASPECT flights collected aerial images over several hundred target sites.
- ASPECT has completed survey locations in Chamber Co. There were no detections.

#### Quality Assurance Sampling Plans (QASP) for Surface Water Quality Monitoring:

Region 6 Environmental Unit is currently working on a number of sampling and analysis plans in preparation for future sampling tasks. The current plan is for TCEQ or EPA to provide residents with containers and ask the residents to bring water to a common location for analysis.

#### Air Monitoring

Monitors are showing that air quality at this time is not concerning and local residents should not be concerned about air quality issues related to the effects of the storm. Due to quick action and proper preparation by state authorities, all the ambient air quality monitors in the network from south of Corpus Christi to Beaumont were protected before the storm. Since then, state authorities are working to get the systems up and running again. As of Saturday, September 2, over 88 percent of monitors are up and working again in Corpus Christi, 85 percent in Houston, and 36 percent in Beaumont. Of the available air monitoring data collected from August 24<sup>th</sup> to September 2<sup>nd</sup>, all measured concentrations were well below levels of health concern.

#### Drinking Water/Wastewater Assessments:

EPA continues to support TCEQ in contacting drinking water and waste water systems. EPA is working closely with the TCEQ to man a “call bank” to reach drinking water and waste water facilities to determine their needs and operational status. Boil water orders have been issued as appropriate. Army of Corp of Engineers is working to locate pumps to provide additional water production capacity. Also, the Texas State Operations Center (SOC) is working to begin on hauling water as soon as a route is determined.

Half (2300) of the 4500 drinking water systems potentially affected by Harvey have been contacted. Of those: 1514 systems are fully operational, 166 have boil-water notices, and 50 are shut down. The agencies are contacting remaining systems to gather updated information of their status. Currently, 1656 of approximately 2469 wastewater treatment plants are fully operational in the affected counties. Assistance Teams are in the field working directly with system operators to expedite bringing systems back to operational status. Additional drinking water assessments should be up and running within the next day. The agencies are aware that releases of wastewater from sanitary sewers that is occurring, due to the historic flooding and are actively working to monitor facilities that have reported discharges, conduct outreach and provide technical guidance to all other wastewater facilities in flood-impacted areas. Houston’s Unified Command will be up and running to support water testing. Assistance Teams will be deployed to work directly with system operators to expedite bringing systems back to operational status. EPA is developing a plan for sampling residential wells, and is coordinating with TCEQ to establish several locations where residents can bring water samples from their wells to be tested.

Note: Reporting format has changed. Region 6 is exploring options for providing the most useful information on drinking water and wastewater facility status in future reports.

#### Fuel Waivers:

EPA has waived requirements for reformulated gasoline and low volatility gasoline through September 15<sup>th</sup> in the following states: CT, ME, MA, NH, RH, VT, DE, DC, MD, NJ, NY, and PA, FL, GA, NC, SC, VA, and WV; all Midwestern states located in PADD 2 - IL, IN, IA, KS, KY, MI, MN, MO, NE, ND, SD, OH, OK, TN, and WI; and all Gulf coast states located in PADD 3 – AL, AR, LA, MS, NM, and TX.

On September 1<sup>st</sup>, four No Action Assurance (NAA) letters were signed by EPA to help address fuel shortages. NAAs will help expedite the distribution of existing gasoline supplies in both TX and LA while the refineries work to re-start and resume normal operations. For each NAA, EPA will exercise discretion not to pursue enforcement for violations of the regulations identified in the NAAs. Each NAA is effective for two weeks, or until September 15<sup>th</sup>. It is anticipated that these NAAs will allow for the immediate distribution in TX of 10 million or more gallons of gasoline to consumers.

The National Protection and Programs Directorate Office of Cyber and Infrastructure Analysis (OCIA) reports refineries in Corpus Christi are starting the process to re-open. These refineries do not provide gasoline to the Colonial Pipeline system which supplies much of the oil to the northeast United States. Gasoline prices across the nation continue to increase. The Department of Energy authorized the Strategic Petroleum Reserve (SPR) to negotiate and execute an emergency exchange agreement with the Phillips 66 Lake Charles Refinery. This decision will authorize 200,000 barrels of sweet crude oil and 300,000 barrels of sour crude oil to be drawn down from SPR’s West Hackberry, LA, site and delivered via pipeline to the Phillips 66 refinery.

#### **Harvey Related Waiver Requests**

Affected State	Waiver Request	Date Received	Status Talking Point	Waiver Response
<b>Reid Vapor Pressure Requirements Waivers</b>				
TX	Letter from TCEQ requesting a waiver of the RVP, RFG and TxLED standards in the Governor's Disaster Proclamation	8/25/17	Granted on 8/25/17	<a href="https://www.epa.gov/enforcement/eastern-and-coastal-texas-fuels-waiver">https://www.epa.gov/enforcement/eastern-and-coastal-texas-fuels-waiver</a>
GA	Amended letter from GA Department of Natural Resources for Atlanta RVP to waive 7.8 RVP requirement to 11.5 RVP	8/29/17	Granted on 8/29/17	<a href="https://www.epa.gov/enforcement/louisiana-fuels-waiver">https://www.epa.gov/enforcement/louisiana-fuels-waiver</a>
LA	Letter from LA governor requesting a waiver of the low RVP requirements.	8/28/17	Granted on 8/28/17	<a href="https://www.epa.gov/sites/production/files/2017-08/documents/louisianafuelswaiver082817.pdf">https://www.epa.gov/sites/production/files/2017-08/documents/louisianafuelswaiver082817.pdf</a>
AR	The state is drafting a waiver request to temporarily waive the requirement for low 9.0lb RVP fuel.	8/31/17	N/A	N/A
OK	A statewide low RVP fuel waiver request was submitted and then the request was amended.	8/28/17	8/30/17	<a href="https://www.epa.gov/enforcement/second-multi-state-fuels-waivers">https://www.epa.gov/enforcement/second-multi-state-fuels-waivers</a>

Affected State	Waiver Request	Date Received	Status Talking Point	Waiver Response
<b>Dyed NRLM Diesel Fuel Waiver</b>				
TX	Letter from TX comptroller requesting a waiver of using dyed NRLM diesel fuel in motor vehicles.	8/29/17	Granted on 8/29/17	<a href="https://www.epa.gov/enforcement/texas-diesel-waiver">https://www.epa.gov/enforcement/texas-diesel-waiver</a>
<b>Low Volatility Conventional Gasoline and Reformulated Gasoline (RFG)</b>				
CT, ME, MA, NH, RH, VT, DE, DC, MD, NJ, NY, and PA, FL, GA, NC, SC, VA, and WV; all mid-western states located in *PADD 2 - IL, IN, IA, KS, KY, MI, MN, MO, NE, ND, SD, OH, OK, TN, and WI; and all Gulf coast states located in PADD 3 -AL, AR, LA, MS, NM, and TX	Issuance of waivers based on requests for the allowance of regulated parties within the listed states to produce, sell, or distribute conventional winter gasoline (including BOBs) with an RVP of 11.5 psi before the addition of any ethanol in any RFG covered area. The waiver for El Paso goes until September 16 <sup>th</sup> due to their State Implementation Plan requirements.	8/30/17	Granted on 8/31/17	<a href="https://www.epa.gov/enforcement/second-multi-state-fuels-waivers">https://www.epa.gov/enforcement/second-multi-state-fuels-waivers</a>

**\*PADD: Petroleum Administration for Defense Districts**

Communications:

On September 1<sup>st</sup>, EPA activated the Crisis Communication Plan to ensure rapid response to providing coordinated, accurate, up-to-date information regarding its field activities. Under a FEMA MA, EPA deployed a Public Affairs Officer to the ESF-15 FEMA Joint Information Center in Austin. An EPA HQ Public Information

Officer (PIO) is fully integrated into the Department of Homeland Security and FEMA communication structure and management, and participates in the daily National Incident Communication Conference Line (NICCL) call.

EOC PIO is working with program offices and Office of Public Affairs (OPA) to review and approve fact sheets on a variety of topics related to EPA's response activities. OPA posts fact sheets to the response website as they are approved. EOC PIO continues to work on review and approval of additional fact sheets provided by ORD, OCSPP and OAR / ORIA (Indoor Air Quality). PIO is also coordinating with FEMA / ESF-15 on external messaging and communications.

Other EOC PIO Activities:

- Developed statements on the status of water systems and the situation at the Arkema facility in Crosby, TX.
- Worked with R6 EOC on a broad story map of the incident which will include Arkema.

Under a FEMA MA, EPA deployed a Public Affairs Officer to the ESF-15 Joint Information Center in Austin. The EPA Public Information Unit in Dallas is fully operational and supported by a Public Information Assistance Team (PIAT). An EPA PIO is also in Corpus Christi to support operations at the ESF-10 Unified Command.

On September 3<sup>rd</sup>, PIO was mobilized to the Houston Mayor's Office and began operating out of the Houston Emergency Center. EPA issued a joint statement with the TCEQ about the controlled burn of materials at the Arkema facility in Crosby.

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